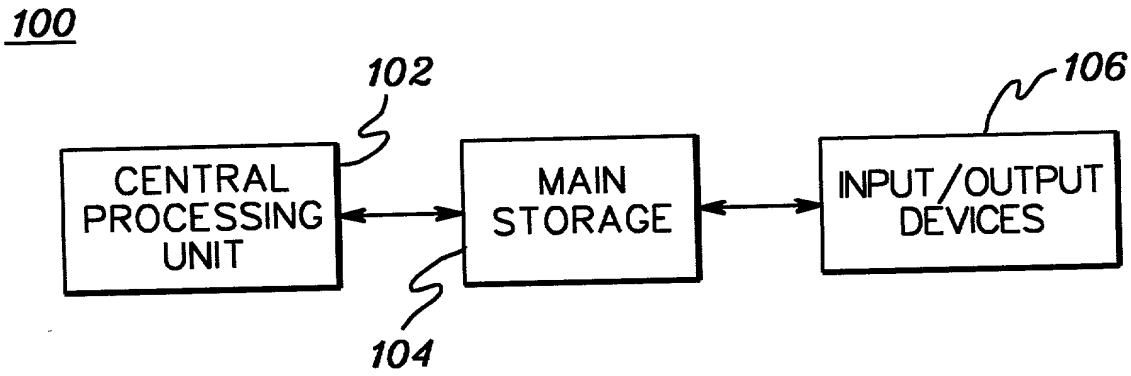
100
102
106
CENTRAL PROCESSING UNIT
MAIN STORAGE
INPUT/OUTPUT DEVICES
104

fig. 1

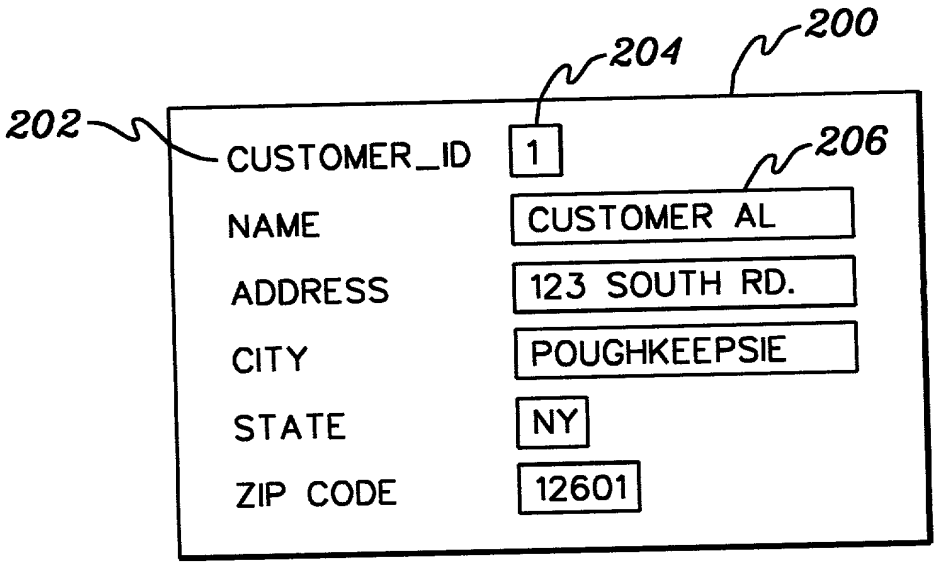
200
204
202
206
CUSTOMER_ID
1
NAME
CUSTOMER AL
ADDRESS
123 SOUTH RD.
CITY
POUGHKEEPSIE
STATE
NY
ZIP CODE
12601

fig. 2

```
IF (CUSTOMER_ID !=BLANK) THEN
  IF (NAME !=BLANK) THEN
    IF (ADDRESS !=BLANK) THEN
      IF (CITY !=BLANK) THEN
        IF (STATE !=BLANK) THEN
          IF (ZIP_CODE !=BLANK) THEN
            CALL PROCESS_FORM
          END IF
        END IF
      END IF
    END IF
  END IF
END IF
```

fig. 3A

```
IF (CUSTOMER_ID !=BLANK) && CUSTOMER_ID IS NUMERIC) THEN
  IF (NAME !=BLANK) && NAME HAS TWO PARTS) THEN
    IF (ADDRESS !=BLANK) && ADDRESS STARTS WITH NUMBER) THEN
      IF (CITY !=BLANK) && CITY IS VALID) THEN
        IF (STATE !=BLANK) && STATE IS VALID) THEN
          IF (ZIP_CODE !=BLANK) && ZIP_CODE IS NUMERIC) THEN
            CALL PROCESS_FORM
          END IF
        END IF
      END IF
    END IF
  END IF
END IF
```

fig. 3B

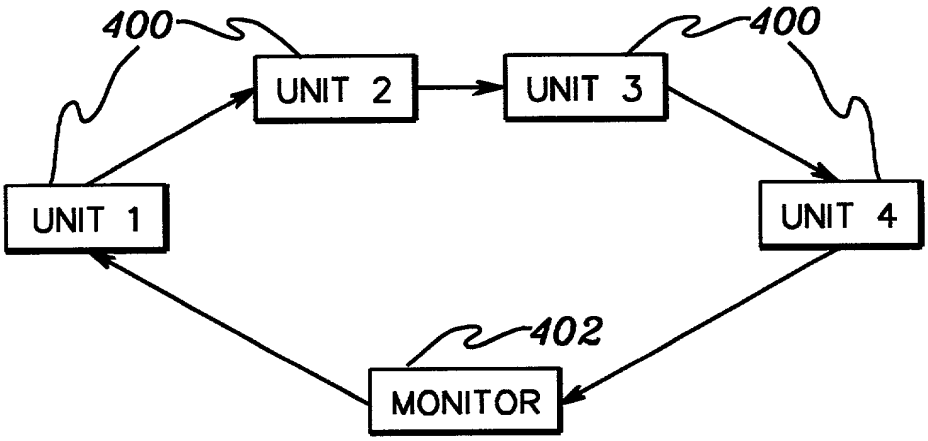

fig. 4

OBSERVABLE OBJECT FOR CUSTOMER_ID

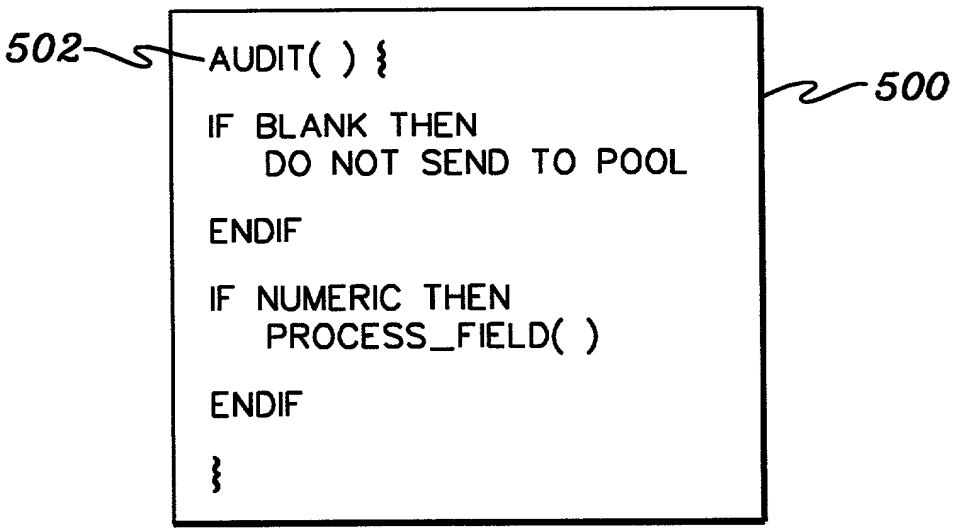

fig. 5

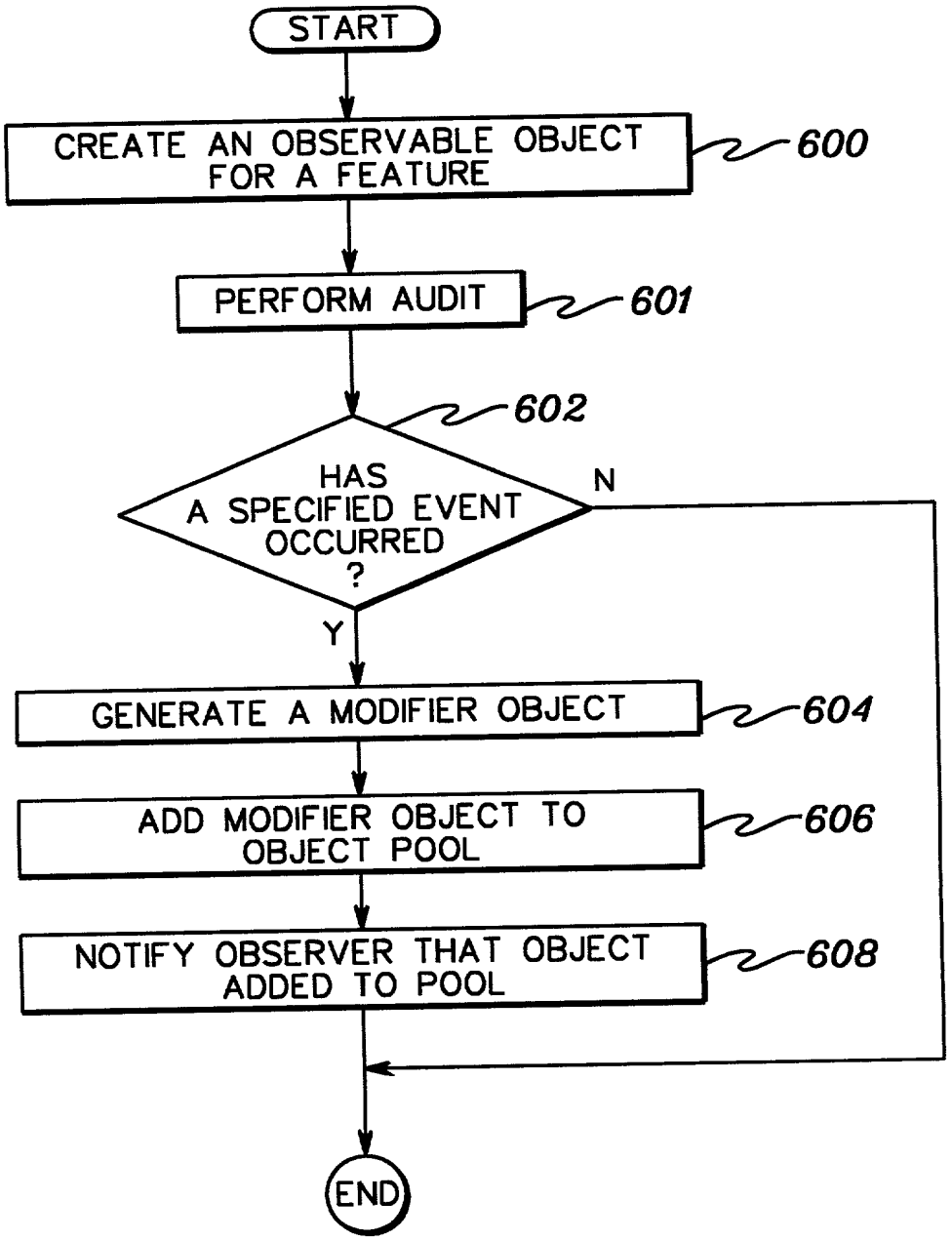
START
CREATE AN OBSERVABLE OBJECT FOR A FEATURE
600
PERFORM AUDIT
601
602
HAS A SPECIFIED EVENT OCCURRED ?
N
Y
GENERATE A MODIFIER OBJECT
604
ADD MODIFIER OBJECT TO OBJECT POOL
606
NOTIFY OBSERVER THAT OBJECT ADDED TO POOL
608
END

fig. 6A

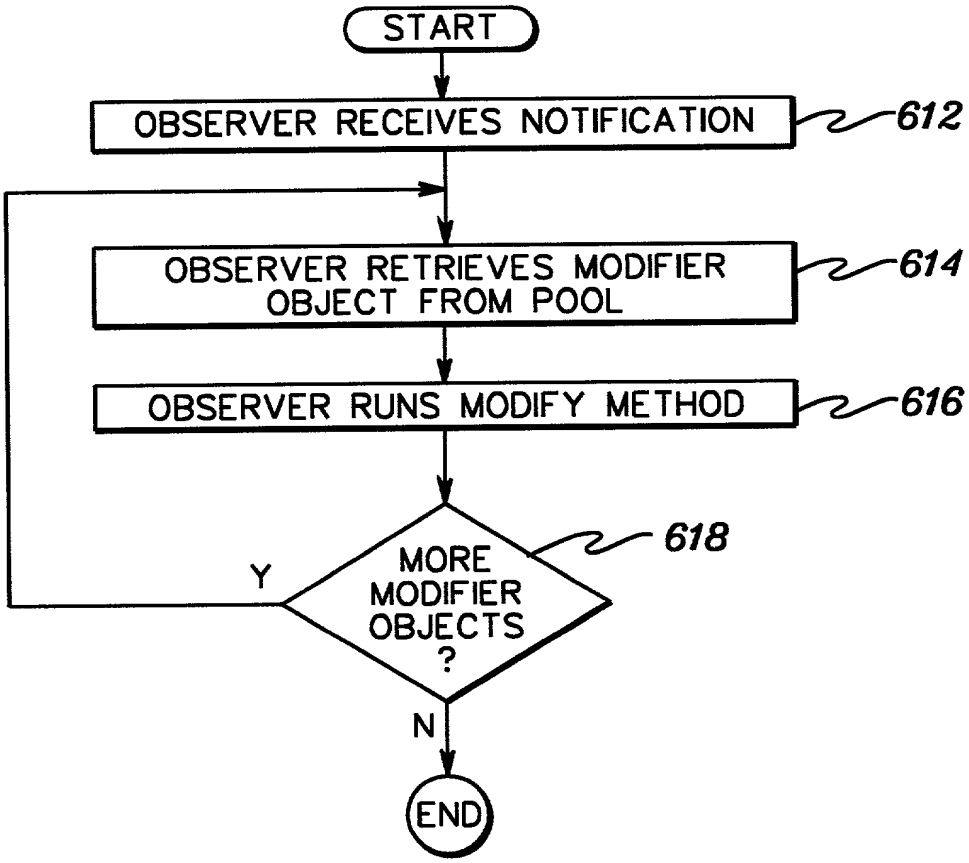
START
OBSERVER RECEIVES NOTIFICATION
612
OBSERVER RETRIEVES MODIFIER OBJECT FROM POOL
614
OBSERVER RUNS MODIFY METHOD
616
MORE MODIFIER OBJECTS ?
618
Y
N
END

fig. 6B

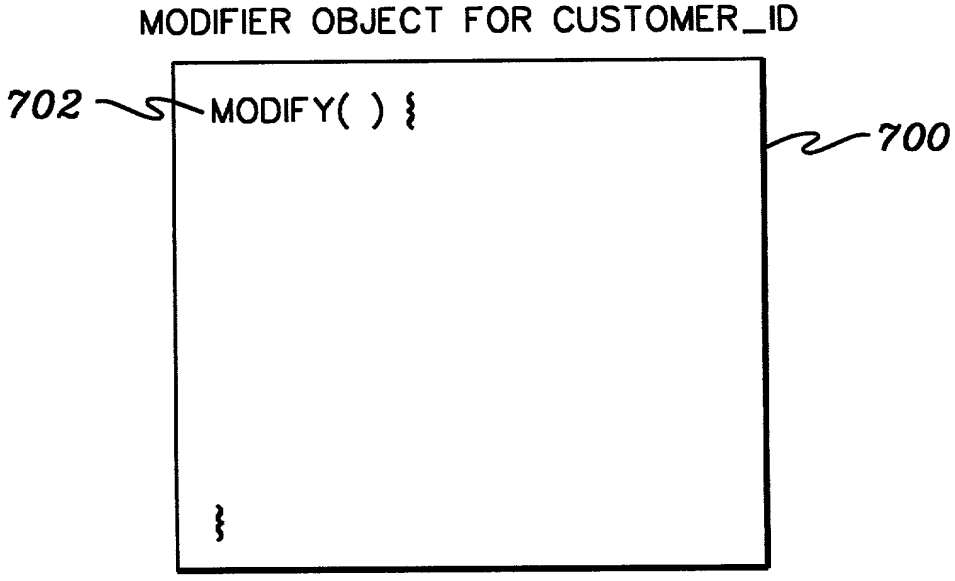
MODIFIER OBJECT FOR CUSTOMER_ID
702
MODIFY( ) {
700
}

fig. 7

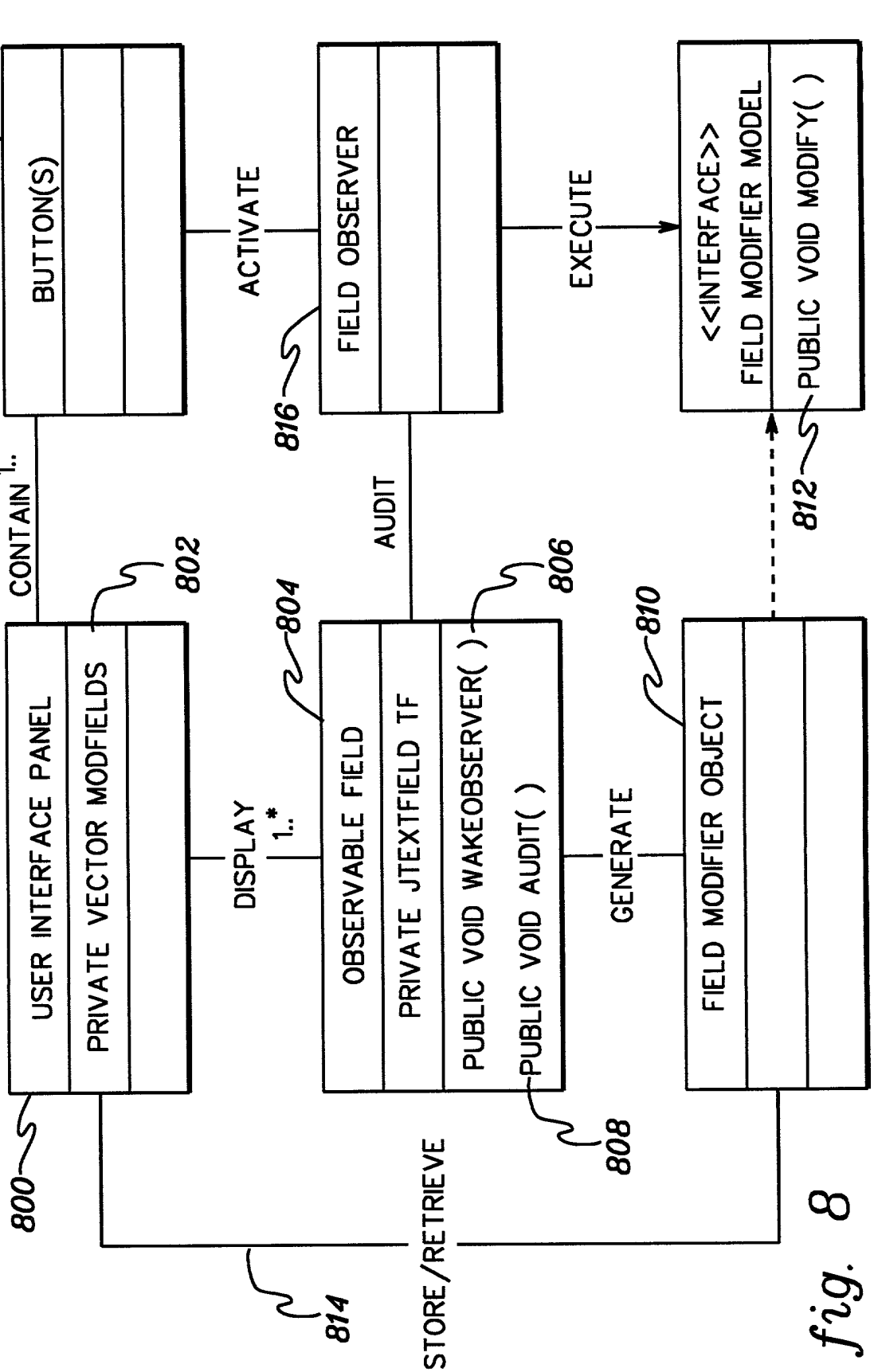
818
BUTTON(S)
ACTIVATE
FIELD OBSERVER
816
EXECUTE
<<INTERFACE>>
FIELD MODIFIER MODEL
PUBLIC VOID MODIFY( )
812
CONTAIN
1..*
802
AUDIT
804
806
USER INTERFACE PANEL
PRIVATE VECTOR MODFIELDS
DISPLAY
1..*
OBSERVABLE FIELD
PRIVATE JTEXTFIELD TF
PUBLIC VOID WAKEOBSERVER( )
PUBLIC VOID AUDIT( )
GENERATE
810
FIELD MODIFIER OBJECT
800
808
814
STORE/RETRIEVE

fig. 8

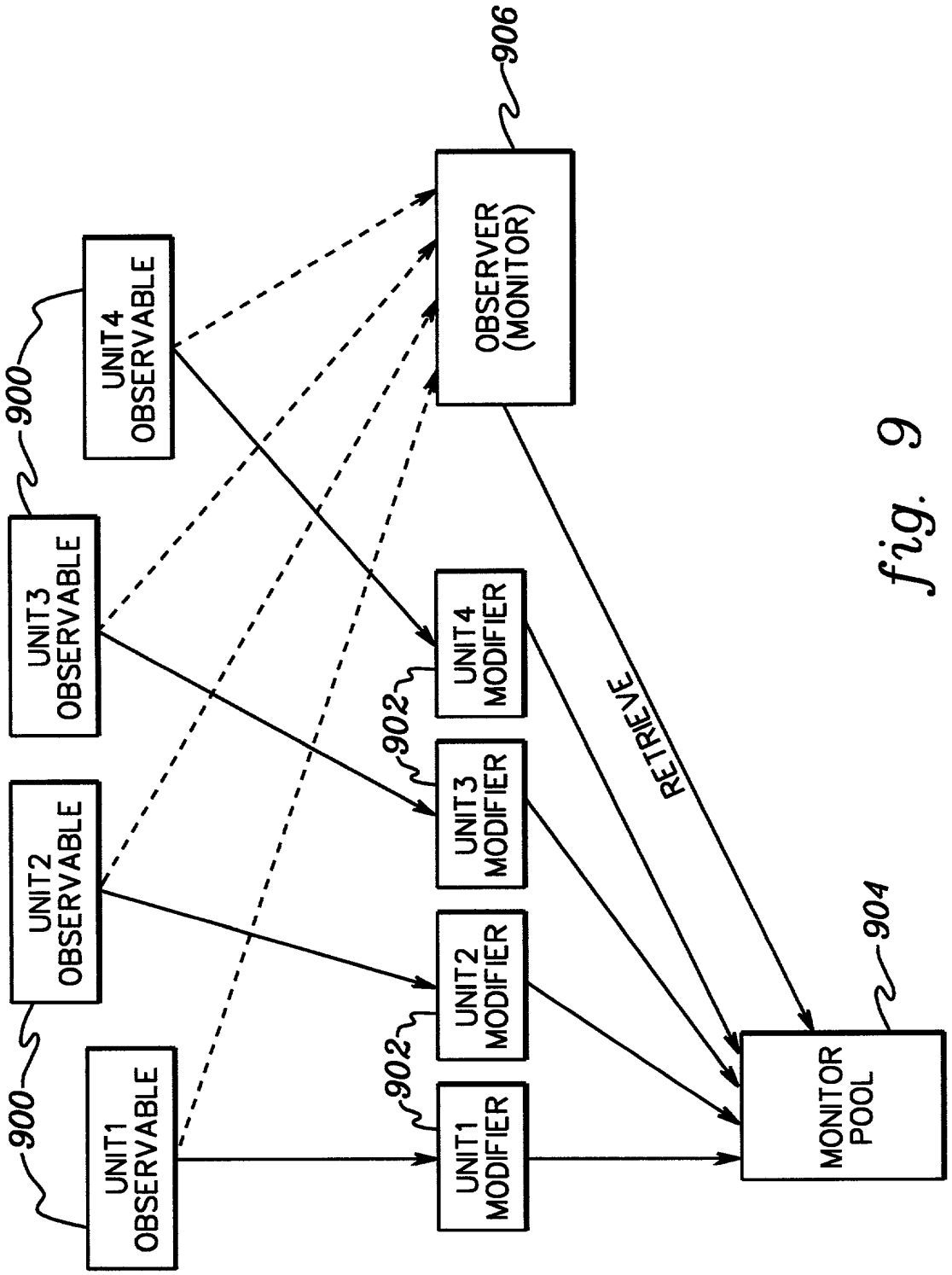
906
OBSERVER (MONITOR)
900
UNIT4 OBSERVABLE
900
UNIT3 OBSERVABLE
900
UNIT2 OBSERVABLE
900
UNIT1 OBSERVABLE
902
UNIT4 MODIFIER
902
UNIT3 MODIFIER
902
UNIT2 MODIFIER
902
UNIT1 MODIFIER
RETRIEVE
904
MONITOR POOL

fig. 9